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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,055	03/24/2005	Michael Harris	124-1111	1768
23117 7590 08/22/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
BRAINARD, TIMOTHY A				
ART UNIT		PAPER NUMBER		
3662				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/529,055

Applicant(s)

HARRIS ET AL.

Examiner

TIMOTHY A. BRAINARD

Art Unit

3662

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 6, 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Schneider et al (US 5082362). Schneider teaches (claim 1) a transmit channel for forming a variable focus transmit beam (fig 15a and col 9, line 48 to col 10, line 7), a receive channel for forming a variable focus receive beam (fig 15a and col 9, line 48 to col 10, line 7), the device is arranged such that all points of focus of the transmit beam and all points of focus of the receive beam fall on a common axis within the operable distance range of the device (fig 15a and col 9, line 48 to col 10, line 7, and col 4 line 67 to col 5, line 21), (claim 18) the channels vary the focus by movement along a movement axis and said movement axes are not parallel (col 5, lines 15-40), (claim 2) the transmit channel comprising an optical arrangement configured to form the focused transmit beam having a lens (fig 15a and col 9, line 48 to col 10, line 7), (claim 6) an optical arrangement configured to form the focused receive beam and having at least one lens (fig 15a and col 9, line 48 to col 10, line 7), (claim 19) movement axes define an acute angle (fig 15a and col 9, line 48 to col 10, line 7).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider as applied to claim 2 above, and further in view of Bowers (US 2003/0184729). Bowers teaches (claim 3) a laser radiation passed to the first optical arrangement via an optical fiber (fig 2, item 215).
4. It would have been obvious to modify Schneider to include the laser radiation passed to the first optical arrangement via a transmit optical fiber because it is one of multiple design choices with new or unexpected result. Schneider (claim 4 and 5) teaches the focus of the transmit beam is adjustable by variation of the relative position of an optical arrangement with respect to a linearly translatable exit aperture of the optical fiber (fig 15c and col 10, lines 36-52).
5. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider as applied to claim 6 above, and further in view of Bowers.
6. Bowers teaches (claim 7) an optical arrangement is configured to couple the received radiation in to a receive fiber (fig 2, item 229).
7. It would have been obvious to modify Schneider to include because an optical arrangement is configured to couple the received radiation in to a receive fiber it is one of multiple methods to transmit light to a detector with no new or unexpected results.

Schneiter teaches (claim 8-10) the focus of the receive beam is adjustable by variation of the relative position of the second optical arrangement with respect to the entry aperture of the receive optical fiber (col 3, lines 11-19), (claim 9) the entry aperture is linearly translatable with respect to the second optical arrangement (col 3, lines 11-19), (claim 10) the exit aperture of the transmit optical fiber is linearly translatable along the optical axis of the first optical arrangement, and the entry aperture of the receive optical fiber is linearly translatable along an axis arranged at a predetermined angle to the optical axis of the second optical arrangement (fig 6a, item 34 and fig 6a, item 39). It would have been obvious to modify the embodiment of Schneiter to include the embodiment of fig 6 of Schneiter because it is one of multiple design choices with no new or unexpected results.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schneiter in view of Bowers as applied to claim 10 above, and further in view of Carlson (US 3554646). Carlson teaches the predetermined angle calculated from the inverse tangent of the ratio of the separation of transmit channel and receive channel (col 3, lines 40-43). It would have been obvious to modify Schneiter in view of Bowers to include the predetermined angle calculated from the inverse tangent of the ratio of the separation of transmit channel and receive channel because it is one of multiple design choices with no new or unexpected results.

Claim 12 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Schneiter as applied to claim 1 above, and further in view of Tocker et al (US 5280332). Tockers teaches (claim 12) a laser device with at least one additional receive channel

(figure 1 item 64 and 64'). It would have been obvious to modify Schneider to include a laser device with at least one additional receive channel where the focus of the additional receive beam is arranged to intersect the focus of the transmit beam within operable range of the device because it is one of multiple design choices with no new or unexpected results.

Claim 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider as applied to claim 1 above, and further in view of Holton (US 2002/0075472). Holton teaches of the device configured to interact with a soft target or a distributed target (paragraph 3). It would have been obvious to modify Schneider to include the device configured to interact with a soft target or a distributed target because it is one of multiple design choices with no new or unexpected results.

Claim 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider as applied to claim 1 above, and further in view of Evans et al (US 6323941). Evans teaches a transmit beam formed from radiation having a wavelength in the region of 1.55 micrometers (col 10 39-31). It would have been obvious to modify Schneider to include a transmit beam formed from radiation having a wavelength in the region of 1.55 micrometers because it is one of multiple design choices with no new or unexpected results.

Claim 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider as applied to claim 19 above, and further in view of Carlson (US 3554646). Carlson teaches an optical lens with a focal length F , on of said channels is displaced from the other of said channels by a distance S , and θ is defined by the equation $\tan \theta = S/F$ (col

3, lines 40-43). I would have been obvious to modify Schneider to include an optical lens with a focal length F , on of said channels is displaced from the other of said channels by a distance S , and θ is defined by the equation $\tan \theta = S/F$ because it is one of multiple design change with no new or unexpected results

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider et al in view of Carlson (US 3554646). Schneider teaches a transmit channel for forming a variable focus transmit beam (fig 15a and col 9, line 48 to col 10, line 7), a receive channel for forming a variable focus receive beam (fig 15a and col 9, line 48 to col 10, line 7), the device is arranged such that all points of focus of the transmit beam and all points of focus of the receive beam fall on a common axis with in the operable distance range of the device (fig 15a and col 9, line 48 to col 10, line 7). Schneider does not teach a an optical lens with a focal length F , on of said channels is displaced from the other of said channels by a distance S , and θ is defined by the equation $\tan \theta = S/F$. Carlson teaches a an optical lens with a focal length F , on of said channels is displaced from the other of said channels by a distance S , and θ is defined by the equation $\tan \theta = S/F$ (col 3, lines 40-43). It would have been obvious to modify Ehbets to include an optical lens with a focal length F , on of said channels is displaced from the other of said channels by a distance S , and θ is defined by the equation $\tan \theta = S/F$ because it is one of multiple design change with no new or unexpected results.

Response to Arguments

Applicant's arguments filed 6/10/2008 have been fully considered but they are not persuasive. Applicant argues that Schneider does not teach:

1) A bistatic laser radar device and variable focus transmit channel.

Response: (col 9, line 48-68) applicant describes a variable focus and receive channel and also scanning the laser over an object.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY A. BRAINARD whose telephone number is (571) 272-2132. The examiner can normally be reached on Monday - Friday 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit: 3662

/T. A. B./

Examiner, Art Unit 3662

/Thomas H. Tarcza/

Supervisory Patent Examiner, Art Unit 3662